

## **Abstract**

In previous research, children with Attention deficit/hyperactivity disorder (AD/HD) have demonstrated impaired response inhibition on the stop paradigm. The purpose of this study was to replicate the research of Oosterlaan & Sergeant (1998) in determining whether AD/HD is uniquely related to impairments in two aspects of executive functioning: (1) response inhibition; and (2) response re-engagement by introducing the change paradigm. Whether the change task is a universal diagnostic tool for AD/HD children in Chinese population is another concern, which further enhances the validity of stop/change paradigm. Children with AD/HD ( $n = 14$ ) and normal controls ( $n = 14$ ) matched on age and sex were compared on the performance of change task. The AD/HD children were recruited from two general hospitals whereas the controls attended normal classes and scored low on all questionnaires. Compared with normal children, AD/HD children showed poor response inhibition and exhibited a deficit in the underlying inhibitory process. More specifically, AD/HD children demonstrated higher variability in the speed of the response re-engagement process and were less accurate. The results suggest that AD/HD involve a more pervasive impairment in cognitive functioning, rather than a deficit restricted to the powers of response inhibition. The change paradigm also broadens the ground as a measure in differentiating AD/HD and normal children cross culturally.